SGS-CSTC Standards Technical Services Ltd.

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FEDERAL COMMUNICATIONS COMMISSION Laboratory Division
7435 Oakland Mills Road Columiba,MD 21046
May 31,2002
Registration number:282399

FCC TEST REPORT

Application No. : 02.11.1253E-1

Applicant : Echo Toys Ltd

FCC ID : HAP35T27

Fundamental Frequency : 27.145MHz

Equipment under Test (EUT):

Name : JET SKI

Model : 35T27

Standards : FCC PART 15, SUBPART C : 2002

Date of Receipt : 29 October 2002

Date of Test : 30 October 2002

Date of Issue : 05 November 2002

Test Result :	**PASS ***

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Kent Hsu
Laboratory Manager
SGS-CSTC Co.,Ltd.

2 Contents

3 General Information

3.1 Client Information

Applicant:	Echo Toys Ltd
Address of Applicant:	Room 1108, Peninsula Centre 67 Mody Road, Tism Sha Tusi East,Kowloon, Hong Kong.

3.2 Details of E.U.T.

Product Name:	JET SKI
Model:	35T27
Power Supply:	9V DC (1 x '6F22' Battery)
Power Cord:	N/A-

3.3 Description of Support Units

The EUT was tested as an independent unit: a radio transmitter.

3.4 Test Location

All tests were performed at:-

SGS-CSTC Standards Technical Services Ltd., Guangzhou Safety & EMC Laboratory, 1/F, Building No. 1, Agriculture Machinery Materials Company Warehouse Ltd., Wushan Road Shipai, Tianhe District, Guangzhou, China. P.C. 510630.

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SGS UK Certificate No.: L32

Frederal Communications Commission laboratory division

Registration number: 282399

3.5 Other Information Requested by the Customer

None.

4 Test Results

4.1 Test Instruments

Description	Manufacturer	Model No.	Asset No.	Date of Cal.
Temperature, Humidity & Barometer	Oregon Scientific	BA-888	EMC023	26-07-2001
Bioconic Antenna	R & S	HK116	EMC047	14-12-2001
3M Semi-Anechoic Chamber	Frankonia	11.5 x 7.5 x 6 m^3	EMC1001	21-01-2002
0.8m Test Table	SGS-CSTC	N/A	EMC1003	N/A
EMI Receiver	R & S	ESCS30	EMC2001	13-11-2001
Spectrum Analyser	Advantest	R3261C+99	EMC071	26-07-2001
Log-Periodic Dipole Antenna	R & S	HL233	EMC2005	17-12-2001
Monitor System	HD-GmbH	N/A	EMC2008	N/A
Antenna Mask	HD-GmbH	AS620M	EMC2010	N/A
Turn-Table	HD-GmbH	DT430	EMC2014	N/A
Turn_Table & Mask Controller	ADVANTEST	HD-GmbH HD100	EMC2015	N/A
Coaxial Cable (12m)	R & S	HFU2-Z4	EMC3001	08-03-2002
EMI Test Software	R & S	ES-K1	EMC5001	N/A

4.2 E.U.T. Operation

Input voltage: 9V DC (1 x '6F22' Battery)

Operating Environment:

Temperature: 24.0 °C
Humidity: 56 % RH
Atmospheric Pressure: 1004 mbar

EUT Operation:

Test the EUT in transmitting mode.

4.3 Test Procedure & Measurement Data

4.3.1 Radiated Emissions

Test Requirement: FCC Part15 C
Test Method: Based on FCC Part15 C Section 15.227
Test Date: 30 October 2002
Measurement Distance: 3m (Semi-Anechoic Chamber)
Requirements: Carrier frequency will not exceed 100dBuV/m AT 3m for Peak.
Out of band emissions shall not exceed:
40.0 dBμV/m between 30MHz & 88MHz
43.5 dBμV/m between 88MHz & 216MHz
46.0 dBμV/m between 216MHz & 960MHz
54.0 dBμV/m above 960MHz
Detector: Peak Scan (120kHz resolution bandwidth)

Test Procedure: The procedure uesd was ANSI Standard C63.4-2000. The receive was scanned from 30MHz to 1000MHz.When an emission was found,the table was roated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the horizontal and vertical polarities and performed a pre-test three orthogonal planes.The worst case emissions were reported.
The following Peak & QP measurements were performed on the EUT on 30 October 2002:
Test the EUT in transmitting mode.

Intentional emission:(RBW=120KHz, VBW=120KHz)

Test Frequency (MHz)	Peak (dBuV/m)		Limits (dBuV/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
27.145	69.4	50.6	100.0	30.6	49.4

Other emissions

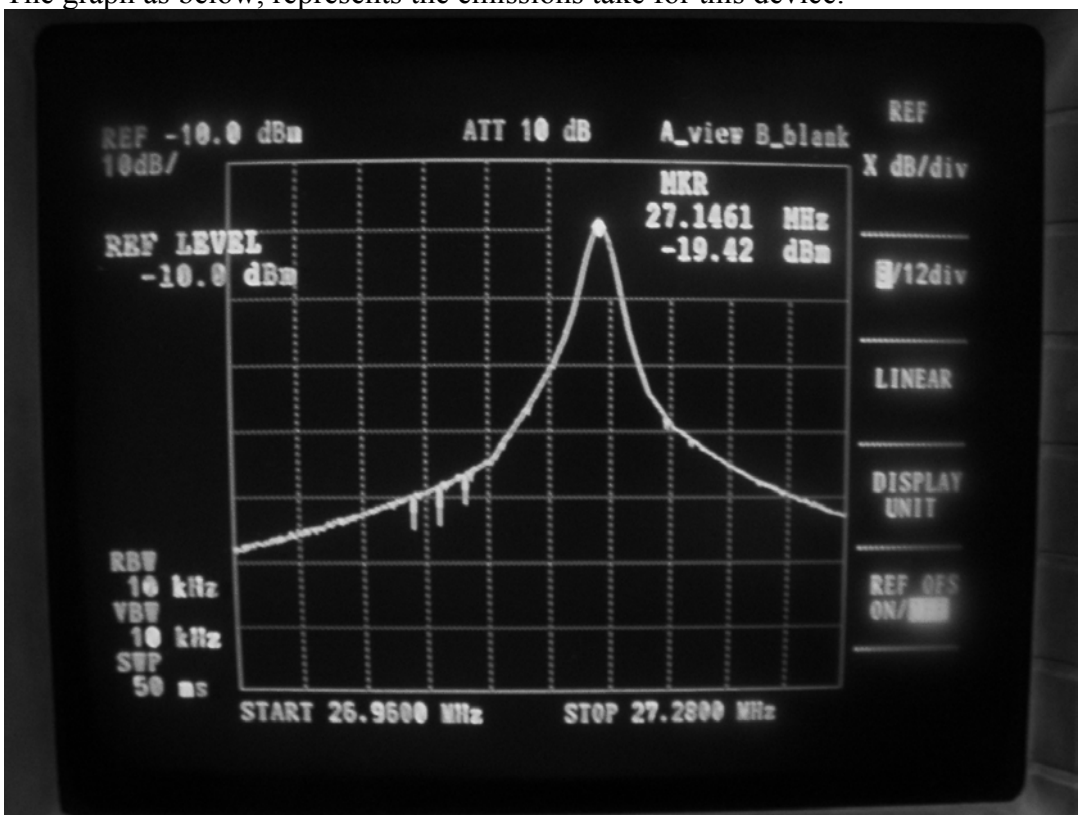
Test Frequency (MHz)	Quasi-Peak (dBuV/m)		Limits (dBuV/m)	Margin (dB)	
	Vertical	Horizontal		Vertical	Horizontal
54.290	21.3	17.2	40.0	18.7	22.8
81.435	18.7	15.5	40.0	21.3	24.5
108.580	20.2	17.8	43.5	22.3	25.7
135.725	24.2	19.9	43.5	19.3	23.5
162.870	23.6	23.9	43.5	19.9	19.6
190.015	28.8	26.5	43.5	14.7	17.0
217.160	22.8	21.3	46.0	23.2	24.7
244.305	23.6	23.4	46.0	22.4	22.6
271.450	18.2	20.8	46.0	27.8	25.2

Test Results: The unit does meet the FCC Part 15 C requirements.

4.3.2 Occupied Bandwidth

Test Requirement:	FCC Part15 C
Test Method:	Based on FCC Part15 C Section 15.227: Operation within the band 26.96 - 27.28 MHz
Test Date:	30 October 2002
Requirements:	The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in Section 15.209.
Method of measurement:	The useful radiated emission from the EUT was detected by the spectrum analyer with peak detector. The vertical Scale is set to – 10dB per division. The horizontal scale is set to 5KHz per division.

The graph as below, represents the emissions take for this device.



The results: The unit does meet the FCC Part 15 C requirements.